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FACSIMILE TRANSMISSION
COVER SHEET

CERTIFICATION OF FACSIMILE TRANSMISSION UNDER 37 CFR § 1.8

I hereby certify that this correspondence is being facsimile transmitted to the U. S. Patent and Trademark Office via the central facsimile number 571-273-8300 on August 22, 2006 and is addressed to Mail Stop Amendment, Commissioner for Patents, P.O., Box 1450, Alexandria, VA 22313-1450.

Amelia Tauchen

Attorney Docket No. 3477-110 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: O'Dowd et al. Group Art Unit: 1649
Application No.: 10/509,787 Confirmation No. 3131
Filed: September 30, 2005 Examiner: John D. Ulm
For: *METHOD OF IDENTIFYING TRANSMEMBRANE PROTEIN-INTERACTING COMPOUNDS*

ATTACHED:

Faxcover	**1 page**
Response	**3 page**
TOTAL	**4 Pages**

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RESPONSE

Sir:

Responsive to the Office Communication dated July 25, 2006, Applicant elects the dopamine D1 receptor, as previously elected in the Response dated June 22, 2006 (page 19, paragraph 2). Claims 19, 48, 76 and 114 read on this species, as Applicant also pointed out in the June 22, 2006 Response.

Applicant reiterates that they respectfully disagree with the restriction. In particular, the restriction should be withdrawn with respect to Groups I and II and these claims should be examined concurrently in the present application.

Group I contains claims 1, 2, 4 to 6, 8, 11, 16 to 20, 27, 30, 31 and 34. Group II contains claims 37 to 41, 43, 46 to 49, 56 and 59.

Both claims 1 and 37 are drawn to methods for screening a candidate compound for its ability to interact with at least one transmembrane protein. In these methods, a cell is transfected with a nucleotide sequence encoding a transmembrane protein containing at least one nuclear localisation sequence (NLS) and the nucleotide sequence is expressed in the cell. The distribution of the expressed protein in a transfected cell contacted with the candidate compound is compared with its distribution in a transfected control cell not contacted with the

compound, an altered distribution of the protein in the presence of the compound compared to that in the control cell indicating that the compound interacts with the transmembrane protein.

In the method of claims 1, 2, 4 to 6, 8, 11, 16 to 20, 27, 30, 31 and 34 (Group I) the distribution of the expressed protein in the cell is determined by determining the distribution of a detectable moiety encoded in the transfecting nucleotide sequence and carried by the expressed protein.

In the method of claims 37 to 41, 43, 46 to 49, 56 and 59 (Group II), the distribution of the expressed protein in the cell is determined by isolating the cell membrane fraction of the cell, contacting that with a labelled ligand of the transmembrane protein and thereby determining the level of the transmembrane protein remaining at the cell membrane.

In view of the foregoing, it is respectfully submitted that it would not constitute an undue burden on the Examiner to examine the Group I and Group II claims together in this application.

Furthermore, Applicant traverses the election of species on the basis that it would not be an undue burden for the Examiner to carry out the search directed to all species which share the function of being nuclear localisation sequences and all species which are transmembrane proteins. Additionally, the present Restriction and Election of Species unreasonably narrows the scope of Applicant's invention subject to examination.

Applicant further notes that even if one or both of the elections of species are maintained, upon the finding of an allowable species, examination will continue with the non-elected species until all species have been examined or a non-allowable species is identified.

This application is now in condition for substantive examination, which action is respectfully requested.

No fee is believed due with this response. However, the Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

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